

CLAIMS

1. A retroviral delivery system capable of selectively transducing a target site, wherein the retroviral delivery system comprises a first nucleotide sequence coding for at least a part of an envelope protein; and one or more other nucleotide sequences derivable from a retrovirus that ensure transduction of the target site by the retroviral delivery system; wherein the first nucleotide sequence is heterologous with respect to at least one of the other nucleotide sequences; and wherein the first nucleotide sequence codes for at least a part of a rabies G protein or a mutant, variant, derivative or fragment thereof that is capable of recognising the target site; wherein the first nucleotide sequence pseudotypes a retroviral vector delivery system; and wherein the retroviral delivery system is derivable from a group consisting of MLV, HIV and EIAV vectors.
- 15 2. A retroviral delivery system according to claim 1 wherein the first nucleotide sequence codes for all of a rabies G protein or a mutant, variant, derivative or fragment thereof.
- 20 3. A retroviral delivery system according to claim 1 or claim 2 wherein at least one of the other nucleotide sequences is derivable from a lentivirus or an oncoretrovirus.
- 25 4. A retroviral delivery system according to <sup>C</sup> ~~any one of the preceding claims~~ wherein the other nucleotide sequences are derivable from a lentivirus or an oncoretrovirus.
- 30 5. A retroviral delivery system according to <sup>C</sup> ~~any one of the preceding claims~~ wherein the other nucleotide sequences is derivable from EIAV.
6. A retroviral delivery system according to <sup>C</sup> ~~any one of the preceding claims~~ wherein the retroviral delivery system comprises at least one NOI.

7. A retroviral delivery system according to claim 6 wherein the NOI has a therapeutic effect or codes for a protein that has a therapeutic effect.

8. A retroviral delivery system according to ~~any one of the preceding claims~~ wherein the target site is a cell.

9. A viral particle obtainable from the retroviral delivery system according to ~~any one of the preceding claims~~ <sup>claim 1</sup>.

10. 10. A retroviral vector wherein the retroviral vector is the retroviral delivery system according to any one of claims 1 to 8 or is obtainable therefrom.

11. A cell transduced with a retroviral delivery system according to any one of claims 1 to 8, or a viral particle according to claim 9, or a retroviral vector according to claim 10.

12. A retroviral delivery system according to any one of claims 1 to 8, or a viral particle according to claim 9, or a retroviral vector according to claim 10, for use in medicine.

13. Use of a retroviral delivery system according to any one of claims 1 to 8, or a viral particle according to claim 9, or a retroviral vector according to claim 10, in the manufacture of a pharmaceutical composition to deliver a NOI to a target site in need of same.

14. A method comprising contacting a cell with a retroviral delivery system according to any one of claims 1 to 8, or a viral particle according to claim 9, or a retroviral vector according to claim 10.

15. Use of a rabies G protein to pseudotype a retrovirus or a retroviral vector or a retroviral particle in order to affect the infectious profile of the retrovirus or the retroviral vector or the retroviral particle, wherein the retrovirus or a retroviral vector

or a retroviral particle is capable of selectively transducing dividing and non-dividing cells.

16. Use of a rabies G protein to pseudotype a retrovirus or a retroviral vector or a  
5 retroviral particle in order to affect the host range and/or cell tropism of the retrovirus  
or the retroviral vector or the retroviral particle, wherein the retrovirus or a retroviral  
vector or a retroviral particle is capable of selectively transducing dividing and non-  
dividing cells.
- 10 17. A retrovirus or a retroviral vector or a retroviral particle pseudotyped with a  
rabies G protein, wherein the retrovirus or a retroviral vector or a retroviral particle is  
capable of selectively transducing dividing and non-dividing cells.
- 15 18. A retroviral delivery system comprising a heterologous *env* region, wherein the  
heterologous *env* region comprises at least a part of a nucleotide sequence coding for a  
rabies G protein and wherein the retroviral system is capable of selectively transducing  
dividing and non-dividing cells
- 20 19. A retroviral delivery system comprising a heterologous *env* region, wherein the  
heterologous *env* region comprises a nucleotide sequence coding for a rabies G protein  
and wherein the retroviral system is capable of selectively transducing dividing and  
non-dividing cells
- 25 20. A pseudotyped retrovirus or retroviral vector or retroviral particle as defined in  
claim 1 or claim 17.

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